Forecasting Tasks

NETRAT, SLAC Contact: Adnan, Les, Umar interested

1. **Evaluate PCA multivariate method of Crovella: Waqar, Adnan,**
   a. Compare PCA results with Holt-Winters/plateau: Adnan
      i. ~~Fetch Data From SLAC, BNL, CALTECH (Pathchirp, Thrulay, Ping): Adnan~~
      ii. ~~Fetch data from CERN~~
      iii. ~~Apply PCA on same data and to get potential alerts: Adnan~~
      iv. ~~Comparison of Run-period results and PCA results: Adnan~~
      v. ~~Improve event detector: Adnan~~
      vi. ~~Docment findings on PCA: Adnan~~
2. Forecasting comparison of Active vs. passive data: Fareena, Adnan
   a. Look at eview implementation of ARIMA (QU has copy): Fareena
      i. Extend to more sites/metrics, see need for Integration & higher orders: Farena, Adnan
      ii. Try with longer time base: Fareena
      iii. Get time estimates : Fareena
   b. Detailed Graphs description: Fareena
   c. ~~Regularization [Done]~~
   d. Look at moodss (http://jfontain.free.fr/statistics.htm): Fareena
   e. ~~Send results/documentation to SLAC [Done 3/15/07]: Fareena~~
   f. ~~Share documentation with COMSATS: Umar~~
   g. Review write up, and send changes by FAX to +92-51-9280782: Les
3. Automatic event isolation: Adnan, Yee
   a. Review the results we are getting at the moment
   b. Provide email lists to get all reports from all monitors together; Jaredg
4. Extend to closer to real time, especially for loss of connectivity or more frequent measurements